WHAT IS CLAIMED IS:

1. A motorized seat belt retractor comprising:

a motor having a motor shaft;

a load limiter for controlling the tensile load on a webbing withdrawn in the event of emergency; wherein the load limiter is configured to utilize a force generated by the rotation of the motor shaft to thereby control the tensile load on the webbing.

wherein the load limit is controlled using a fuse located in series with the motor in an electrical circuit configured to carry a driving current to the motor.

- 2. The motorized seat belt retractor of claim 1, wherein the fuse is configured to open at a predetermined value of current flow through the circuit to thereby open-circuit the motor and control the load limiter.
- 3. The motorized seat belt retractor of claim 1, wherein said load limiter is configured to control the tensile load on the webbing by alternatively placing the motor in a short-circuit and non-short-circuit condition according to a predetermined sequence.
- 4. The motorized seat belt retractor of claim 3, further comprising an electrical controller configured to establish the predetermined sequence.
- 5. The motorized seat belt retractor of claim 4, wherein the fuse is configured to open at a predetermined value of current flow through the circuit to thereby open-circuit the motor and control the load limiter.
- 6. The motorized seat belt retractor of claim 1, wherein said load limiter includes a mechanism for transferring the force generated by the rotation of the motor shaft to the webbing.

Attorney Docket No.: 086142/0612

7. The motorized seat belt retractor of claim 6, wherein said mechanism comprises a gear train which couples the shaft of the motor to a spool on which the webbing is wound.

- 8. The motorized seat belt retractor of claim 7, wherein said mechanism includes a locking mechanism to prevent the motor shaft from rotating in a direction corresponding to the webbing being withdrawn.
- 9. The motorized seat belt retractor of claim 1, wherein the load limiter is configured to increase the force generated by the motor at a rate determined based on the weight of a vehicle occupant.
- 10. The motorized seat belt retractor of claim 9, wherein the control device is an electrical controller.
- 11. The retractor of claim 10, wherein the load limiter only utilizes the force generated by the motor.